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INTERNAL CORRESPONDENCE

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 R. N. WHEELER, JR.
CHEMICALS AND PLASTICS

RIVER ROAD, FOUNT BROOK, N.J.

To (Name) R. N. Wheeler
 Division UCC - Chemicals and Plastics
 Location So. Charleston, WV

Date December 8, 1978

Originating Dept. R & D

Answering letter date

Copy to L. E. Brydia
 T. B. Gibb
 R. A. Gregory
 G. T. Kwiatkowski
 R. W. Lasher
 G. S. Peacock
 F. G. Willeboordse

Subject Residual Vinyl Chloride Monomer
 in Bakelite Solution Vinyl
Resin VAGH

You have requested information on the residual vinyl chloride monomer content of vinyl resin VAGH, which we may have gathered as part of our overall studies on the residual vinyl chloride monomer content of solution polymerized vinyl resins. As you know, we are using the head-space gas chromatographic method of analysis developed by the Food and Drug Administration for use with vinyl chloride homopolymers which we have modified for our use with vinyl chloride-vinyl acetate copolymers.

We now have sufficient data for vinyl resin VYHH to conclude that the residual monomer content of that resin as polymerized will be 100 to 150ppb. After four days' exposure to air at room temperature, the VCM level drops to about 10ppb. Samples held in glass containers at room temperature for six to nine months have been shown to contain 4ppb. The residual monomer content of VYHH in paper shipping bags, as received by our customers, will be less than 5ppb, depending upon storage conditions.

As you know, VAGH resin is derived from VYHH by a process that involves dissolution of VYHH resin in solvent and subsequent precipitation of the resin as VAGH, followed by washing with a large excess of a solvent-water mixture. Hence, one would assume the residual VCM level of VAGH would be significantly below that of VYHH. However, when we analyzed VAGH samples stored in glass containers for VCM by the modified FDA GC method, we found 7ppb. In other laboratories, VAGH samples have been analyzed as low as 0.4ppb.

On the basis of the above, it is a reasonable assumption and our considered opinion that the residual vinyl chloride monomer content of VAGH in paper containers as received by our customers will be less than 5ppb.

WBA/p

W. B. Ackart
 W. B. Ackart, Ph.D.
 Manager, FDA Liaison

UCC 102535